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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/545,571	04/07/2000	Rajeev Chawla	06502.0177	1838
22852	7590	02/21/2006	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			FERRIS, DERRICK W	
			ART UNIT	PAPER NUMBER
			2663	

DATE MAILED: 02/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/545,571	Applicant(s) CHAWLA ET AL.	
	Examiner Derrick W. Ferris	Art Unit 2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46, 48-56, 58-66, 68-76 and 78-80 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7, 17, 27, 37, 41-46, 48-56, 58-66, 68-76 and 78-80 is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-16, 18-26, 28-36, and 38-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-6, 8-16, 18-26, 28-36, and 38-40** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6389,462 B1 to *Cohen et al.* ("*Cohen*") in view of "Local and Metropolitan Area Networks" to *Stallings et al.* ("*Stallings*").

As such to **claim 1**, *Cohen* discloses in figure 1 a client as 101-n, a router as e.g., router 103, a proxy server as proxy redirector 104 and a destination as any of the devices connected to Internet 105. As such, the client device establishes communication sessions between the client and the intermediate entity and the destination and intermediate entity using TCP (i.e., using SYN packets and ACK SYN packets). A packet is further sent to the router since the router is before the proxy redirector 104, see e.g., figure 1.

Determining a destination address corresponding to the destination based on the client address included in the second packet is taught e.g., as an HTTP request packet sent to the proxy redirector 104. See e.g., column 8, line 10- column 11, line 19. From the HTTP request packet, a third packet is further created/modified including the data and the destination address, see e.g., column 8, line 11-52 and table 1 at column 10. The third packet is further sent to the destination using the destination where the destination is either an origin server or a proxy cache based on the CCB information. Once the request

has reached the destination, a response is sent back to the proxy redirector 104 which includes the destination address. A client address is further determined corresponding to the client based on the destination address and sending the client using the client address base on e.g., the information stored in the CCB, see e.g., column 9, lines 1-19.

Cohen may be silent or deficient to the further limitation of a second packet (i.e., a packet sent between a router and a proxy server). In particular, it is clear from the teachings of the reference that *Cohen* treats the router and proxy server as a combined entity similar to applicant's invention, see e.g., column 6, lines 29-30 of *Cohen*. As such, *Cohen* may not clearly teach creating and sending a second packet from the router to the proxy server, the second packet including the data, the client address, and a *proxy address*. In particular, the packet received by the combined intermediate entity contains the data and client address but does not clearly teach a proxy address.

Stallings teaches the further recited limitation above at e.g., middle of page 455 with respect to case 2.

The proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify *Cohen* by clarifying a relationship between the router 103 and proxy redirector 104 where it is well known in the art that in order for the packet to reach the proxy redirector 104 the packet must further include a proxy redirector 104 address (i.e., a destination address) thus further teaching a proxy address.

As such, examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the above limitation. In particular, the motivation

Art Unit: 2663

for modifying the reference or to combine the reference teachings would be to provide an address such that the packet knows how to reach the router. In particular, *Stallings* cures the above-cited deficiency by providing a motivation found at e.g., middle of page 455. Examiner also notes a reasonable expectation of success since the changed destination address is independent of the third packet.

As to **claim 2**, the destination can either be a proxy cache or an origin server 107 where the address is determined based on the destination in order to forward the packet.

As to **claim 3**, the connection setup acknowledgment is the ACK SYN packet, see e.g., column 9, lines 1-19.

As to **claims 4-6**, the table is the CCB table. As such, please see e.g., column 8, line 59 – column 9, line 18 with respect to the type of information stored in the table.

As to **claim 8**, see a request message e.g., at column 8, line 10- column 11, line 19.

As to **claim 9**, the service is a network address translation.

As to **claim 10**, the proxy cache can be selected based on load balancing, see e.g., column 14, lines 9-34. As such, the forth packet could be the response.

As to **claim 11**, see similar rejection to claim 1.

As to **claim 12**, see similar rejection to claim 1.

As to **claim 13**, see similar rejection to claim 3.

As to **claim 14**, see similar rejection to claim 4.

As to **claim 15**, see similar rejection to claim 5.

As to **claim 16**, see similar rejection to claim 6.

Art Unit: 2663

As to **claim 18**, see similar rejection for claim 8.

As to **claim 19**, see similar rejection for claim 9.

As to **claim 20**, see similar rejection for claim 10.

As to **claim 21**, see similar rejection for claim 1.

As to **claim 22**, see similar rejection for claim 3.

As to **claim 23**, see similar rejection for claim 3.

As to **claim 24**, see similar rejection for claim 4.

As to **claim 25**, see similar rejection for claim 5.

As to **claim 26**, see similar rejection for claim 6.

As to **claim 28**, see similar rejection for claim 8.

As to **claim 29**, see similar rejection for claim 9.

As to **claim 30**, see similar rejection for claim 10.

As to **claim 31**, see similar rejection for claim 1.

As to **claim 32**, see similar rejection for claim 3.

As to **claim 33**, see similar rejection for claim 3.

As to **claim 34**, see similar rejection for claim 4.

As to **claim 35**, see similar rejection for claim 5.

As to **claim 36**, see similar rejection for claim 6.

As to **claim 38**, see similar rejection for claim 8.

As to **claim 39**, see similar rejection for claim 9.

As to **claim 40**, see similar rejection for claim 10.

Allowable Subject Matter

Art Unit: 2663

3. **Claims 7, 17, 27, 37, 41-46, 48-56, 58-66, 68-76 and 78-80** are allowed.

Response to Arguments

4. Applicant's arguments filed 01/18/2006 have been fully considered but they are not persuasive. In particular, it appears that applicant may be misconstruing the examiner's rejection. Specifically, in reference to *Cohen*, a first packet is a TCP SYN packet, see e.g., column 8, lines 59-67. In particular, a TCP SYN packet contains at least the client IP address and the origin server IP address. As shown in figure 1 of *Cohen*, a router is router 103 and a proxy server is taught as proxy redirector 104. Proxy redirector 104 is considered a proxy since it performs address translation (i.e., *layer 3* address translation using NAT). Not clearly taught by the reference is a second packet from the router. In particular, *Cohen* for the most part treats the router 103 and proxy redirector 104 as a combined intermediate entity, see e.g., column 6, lines 23-46. Hence a second packet is taught by the references in combination where the second packet *is still a TCP SYN packet*. In particular, once the TCP SYN packet reaches the proxy redirector 104, a CCB table is created, see e.g., column 8, lines 59-column 9, line 19 which uses the client address and the origin server address as part of the CCB table. At issue between the examiner and applicant appears to be the further limitation of "*determining a destination address corresponding to the destination based on the client address included in the second packet*". The examiner notes that the above limitation is met with respect to a third packet or HTTP request packet. In particular, an HTTP request packet is sent from the client 101, through a router 103, to a proxy redirector 104. In particular, the above "destination address" determined is the proxy cache 110 address and "the destination" is the origin server. Specifically, at the proxy redirector 104, a modified HTTP request is formed based on information in the CCB table (see e.g., table 1

Art Unit: 2663

at column 10). In particular, the destination address of the origin server (204.71.200.244) is modified (or determined) to be that of the selected proxy cache 110 (135.104.25.31). The address is determined, in part, based on the contents of the CCB table which include the client address (i.e., the client address is used to ensure that “all subsequent packets that originate from the same client with the same TCP port number are forwarded to the same proxy” – column 9, lines 6-8). Note previously, that the client address was obtained when the CCB table was created from the SYN packet received at the proxy redirector 104 (i.e., the second packet). Hence the client address was included in the second packet. Thus it is believed that the rejection is proper and is thus maintained. A third packet is further construed as one of the HTTP request packets and a response is the HTTP response. It is further noted that the dependent claims that teach away from the above claim interpretation where previously considered allowable by the examiner.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2663

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (571) 272-3123.

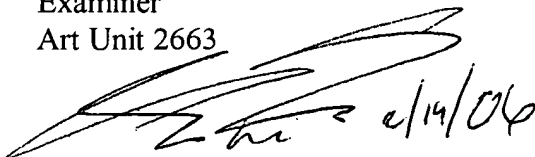
The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571)272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


DWF

Derrick W. Ferris
Examiner
Art Unit 2663

 2/14/06

**DERRICK FERRIS
PATENT EXAMINER**